2037

Mammals

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ESTHER K. MEEKS

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MAMMALS

Esther K. Meeks

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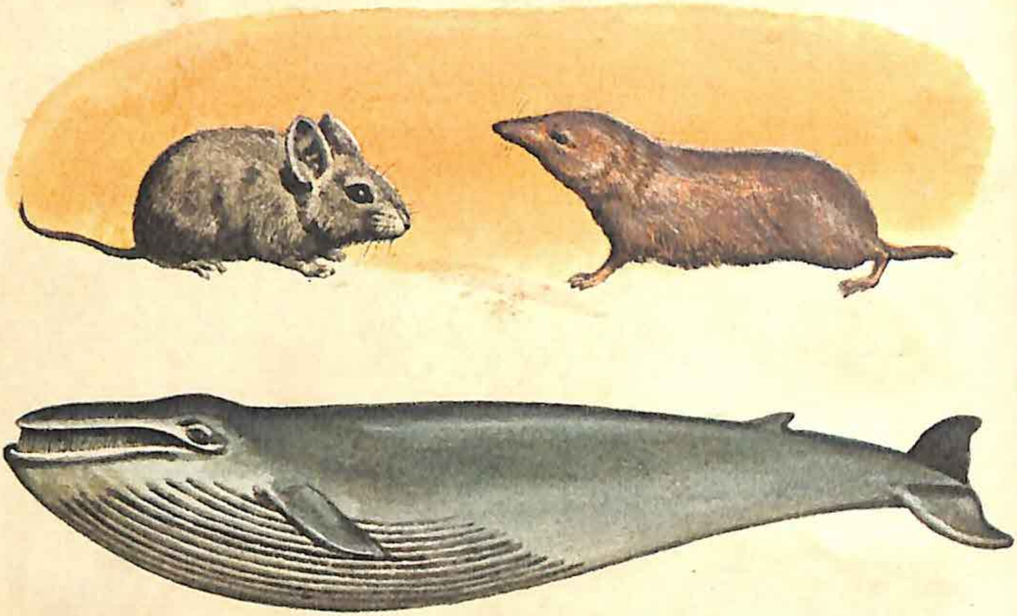
Scientists divide all the different forms of life on earth into groups. Almost all animal life is divided into two big groups. Animals with backbones, called vertebrates, make up one group. Animals without backbones, called invertebrates, make up the other group. Starfish and beetles are invertebrates.

Vertebrates, or animals with backbones, are again divided into groups: into fish, such as salmon and sharks; into amphibians, such as frogs and toads; into reptiles, such as snakes and alligators; into birds, such as robins and eagles; and into mammals, such as mice, dogs, horses and men.

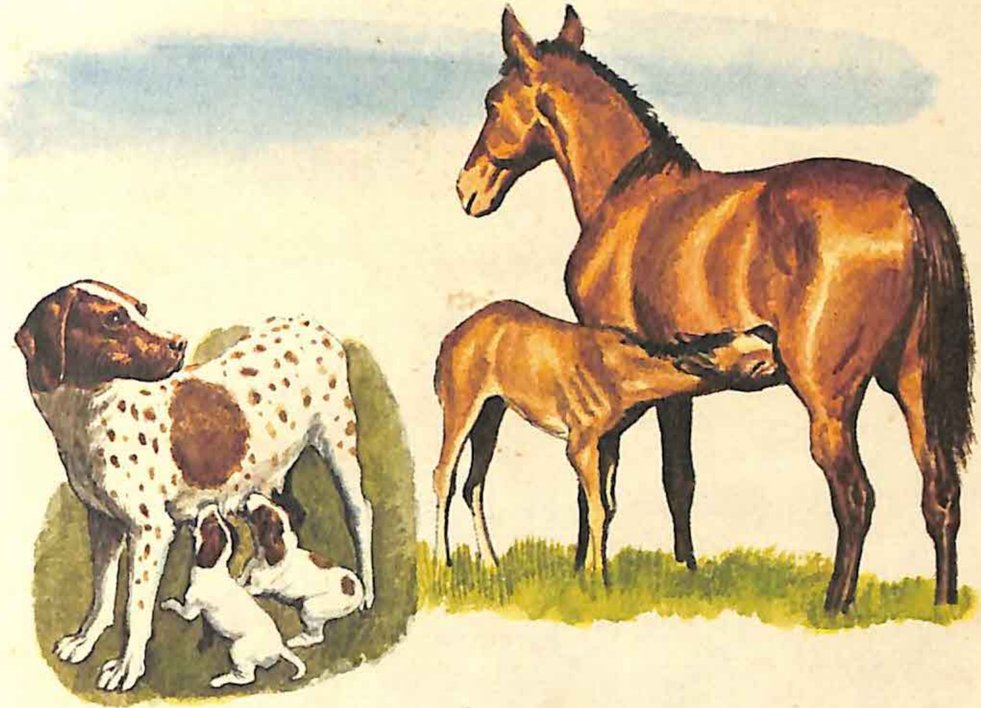
The mouse and the shrew are two very small mammals.
The whale is the largest mammal.



Mammals can be very small. Some mice and shrews are only a few inches long and weigh less than an ounce. Mammals can also be very big. Some whales are more than 100 feet long and weigh as much as 120 tons.

Different kinds of mammals often do not look at all alike. But there are things about all kinds of mammals that are almost always the same.

Like other young mammals, baby dogs and horses feed on their mothers' milk.



The young of most mammals are born alive, instead of being hatched from eggs.

The young of all mammals are fed with their mother's milk.

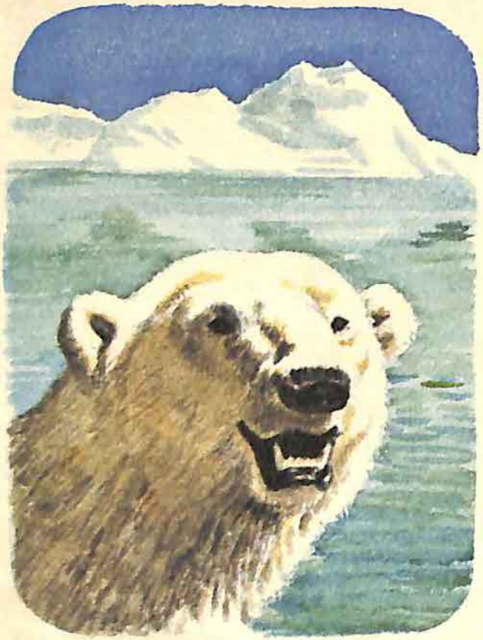
All mammals have some hair or fur on their bodies.

All mammals have warm blood.

Mammals live all over the world. They can do this because they are warm-blooded, and their bodies can stay warmer or cooler than the air or water about them.

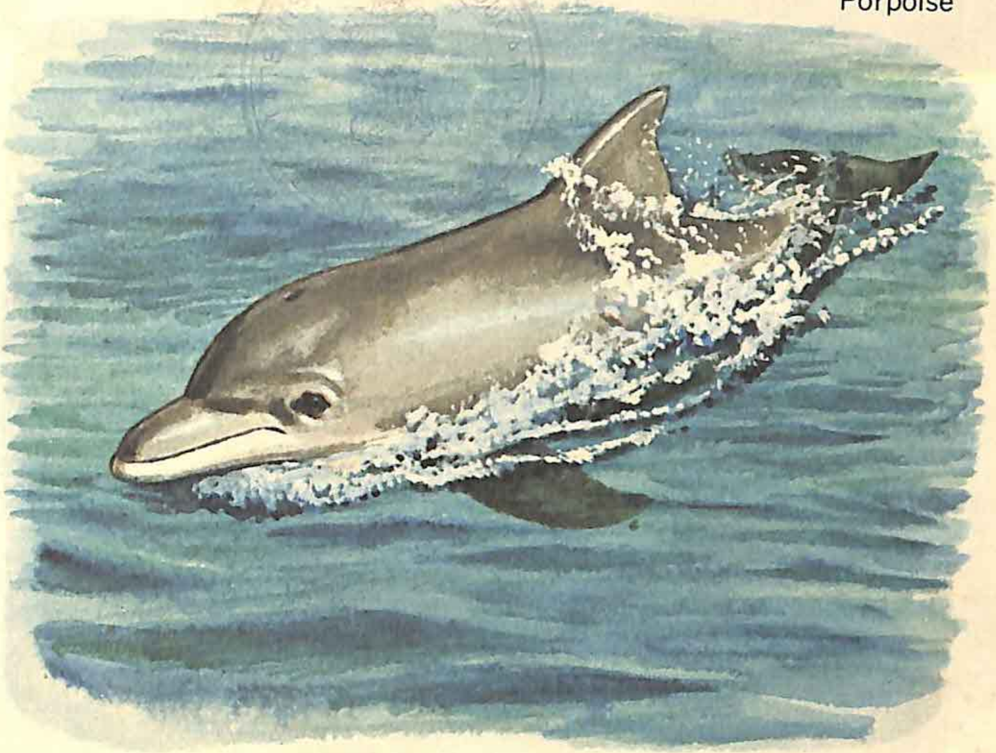
Polar bears and walruses live in the very cold climate near the North Pole.

Lions live in the hot parts of Africa. Monkeys generally live in hot countries too, but some, like those in Tibet, can endure severe cold.



Polar Bear

Lion

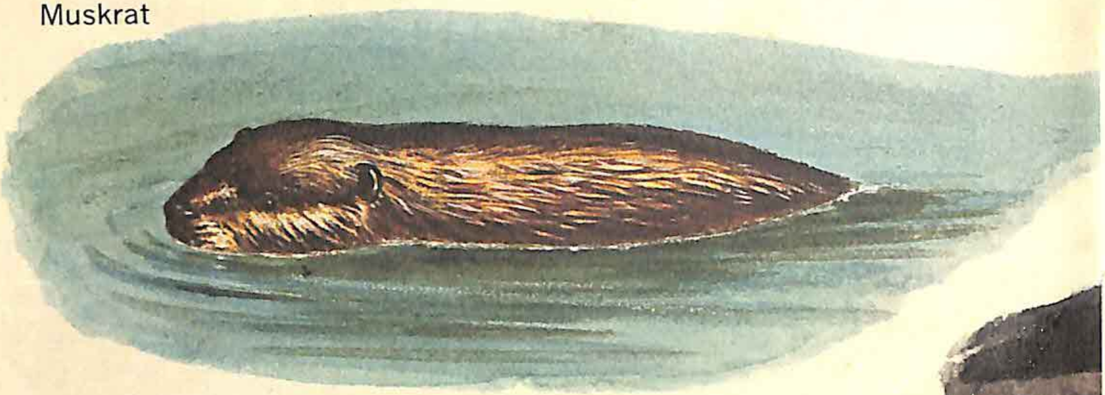


Porpoise

Many kinds of mammals live in the temperate parts of the world, where differences between summer and winter temperatures are not so great.

Mammals live in many different places. Some, like whales and porpoises, live in the oceans. Seals and walruses and sea lions live in the sea and on the land near the sea.

Muskrat



Hippopotamus

The African hippopotamus, and the muskrats and beavers of North America are animals that live on the land, but also spend much time in the waters of rivers and lakes.

Moles are mammals that live underground most of the time.

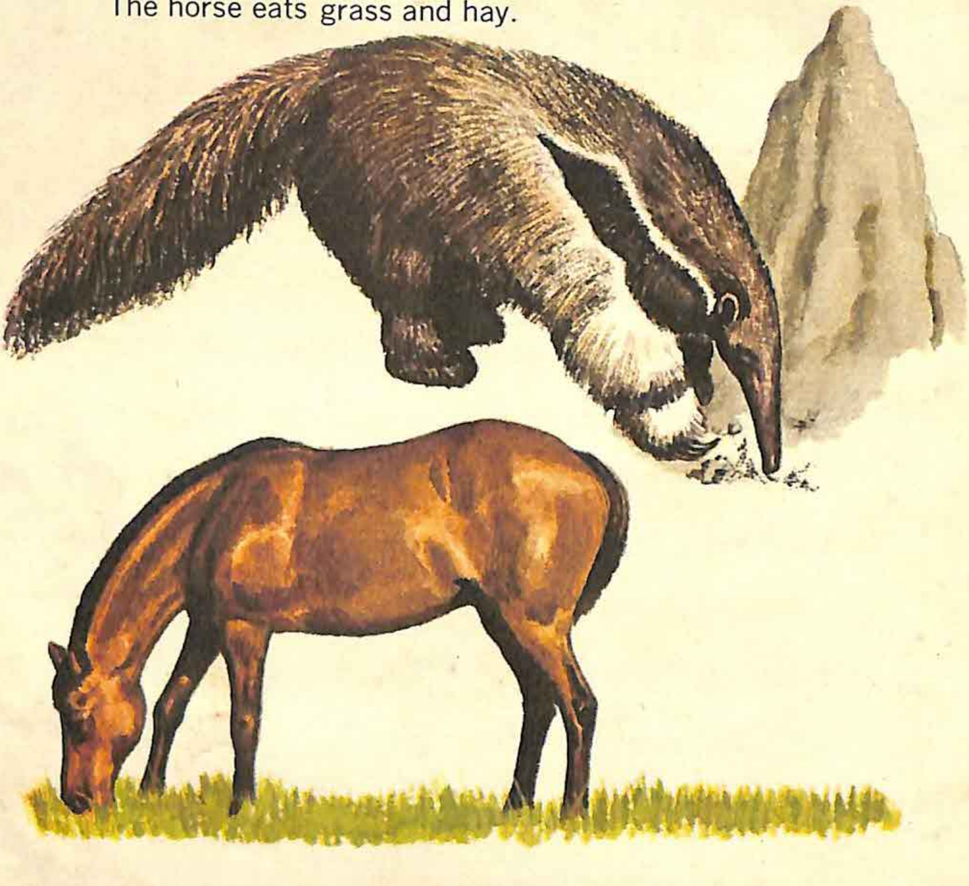
Sloths and some monkeys live in trees high above the ground.

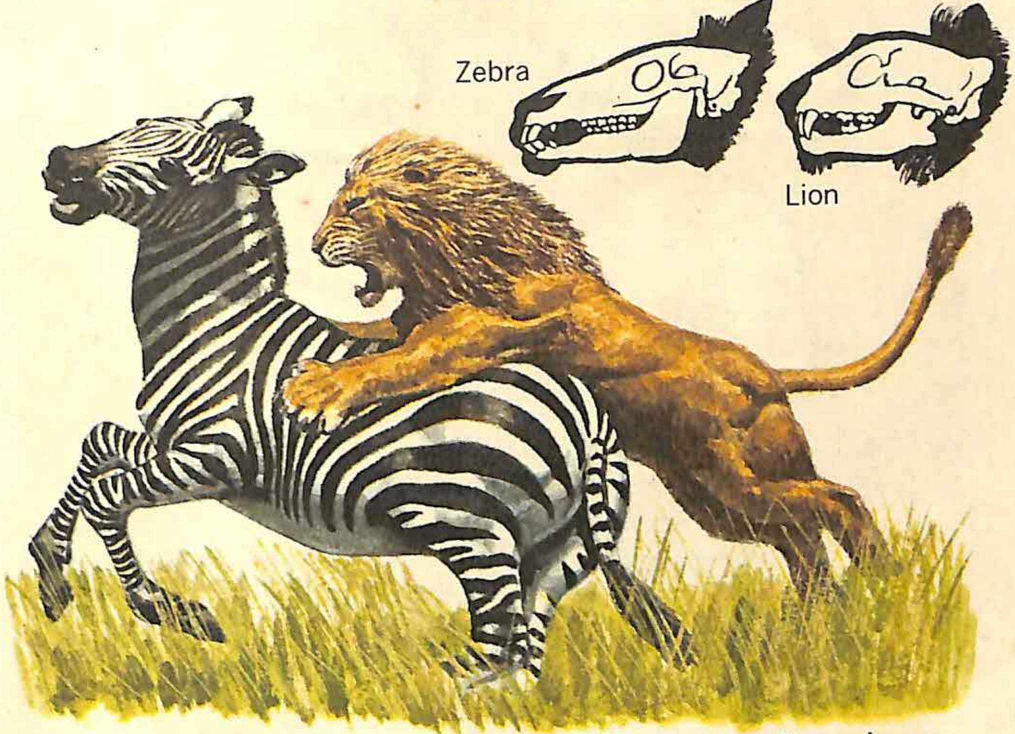
Some bats live in trees, while others live in caves.

Most mammals live on the ground.

Mammals live on various kinds of food. Some mammals, like the ant-eater and the shrew, eat insects. Some mammals, like the cow, the sheep, the deer and the horse, eat only plants. Some mammals, like bears and man, eat both plants and meat.

The ant-eater licks up insects with its long sticky tongue.
The horse eats grass and hay.

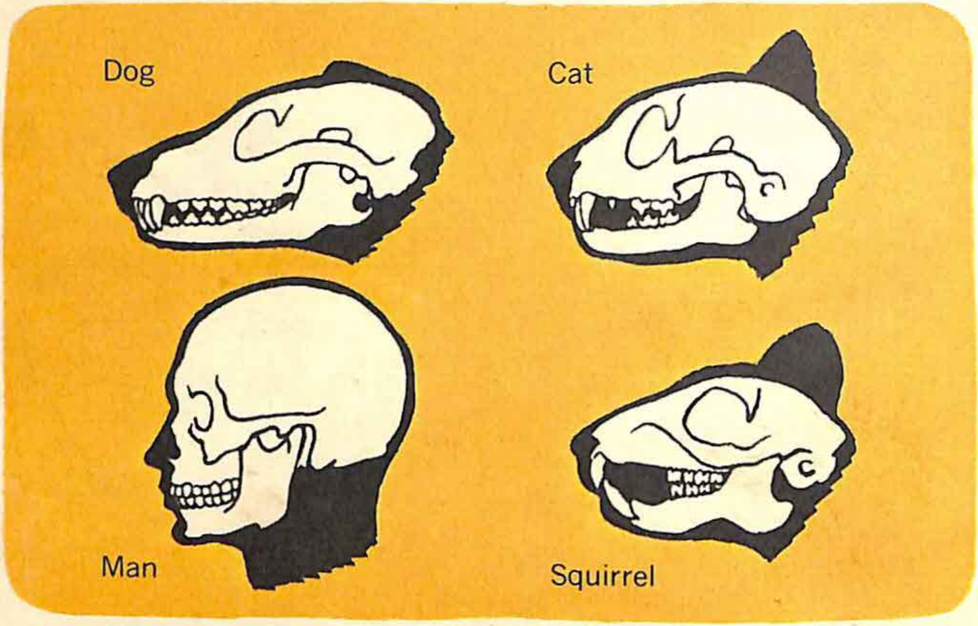




The zebra, a plant-eater, has flat teeth. The lion, a meat-eater, has sharp teeth.

The kind of teeth a mammal has will often show what kind of food it eats. Cows and horses have large, flat teeth which they use for grinding their food. These animals eat grasses and leaves and other plant food.

Lions, tigers and wolves have some long sharp teeth. They are all meat-eaters.



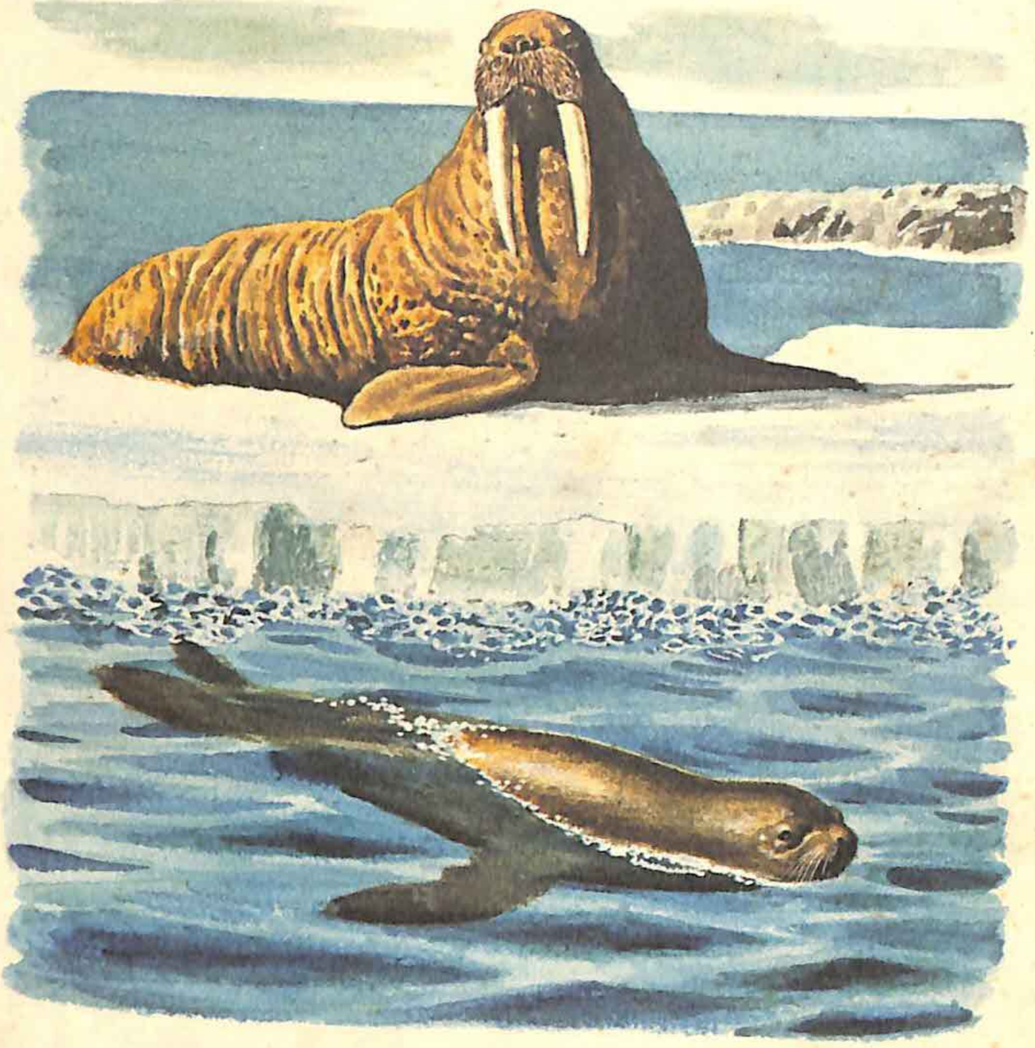
Mammals that eat both plants and meat can have as many as four kinds of teeth. They have sharp teeth for cutting, and teeth that are large and flat for grinding. Many of these animals have teeth for shearing and teeth for stabbing as well.

Some mammals are gnawing animals. They have two pairs of large, strong front teeth. Squirrels, mice, rabbits and beavers are some of the gnawing animals.

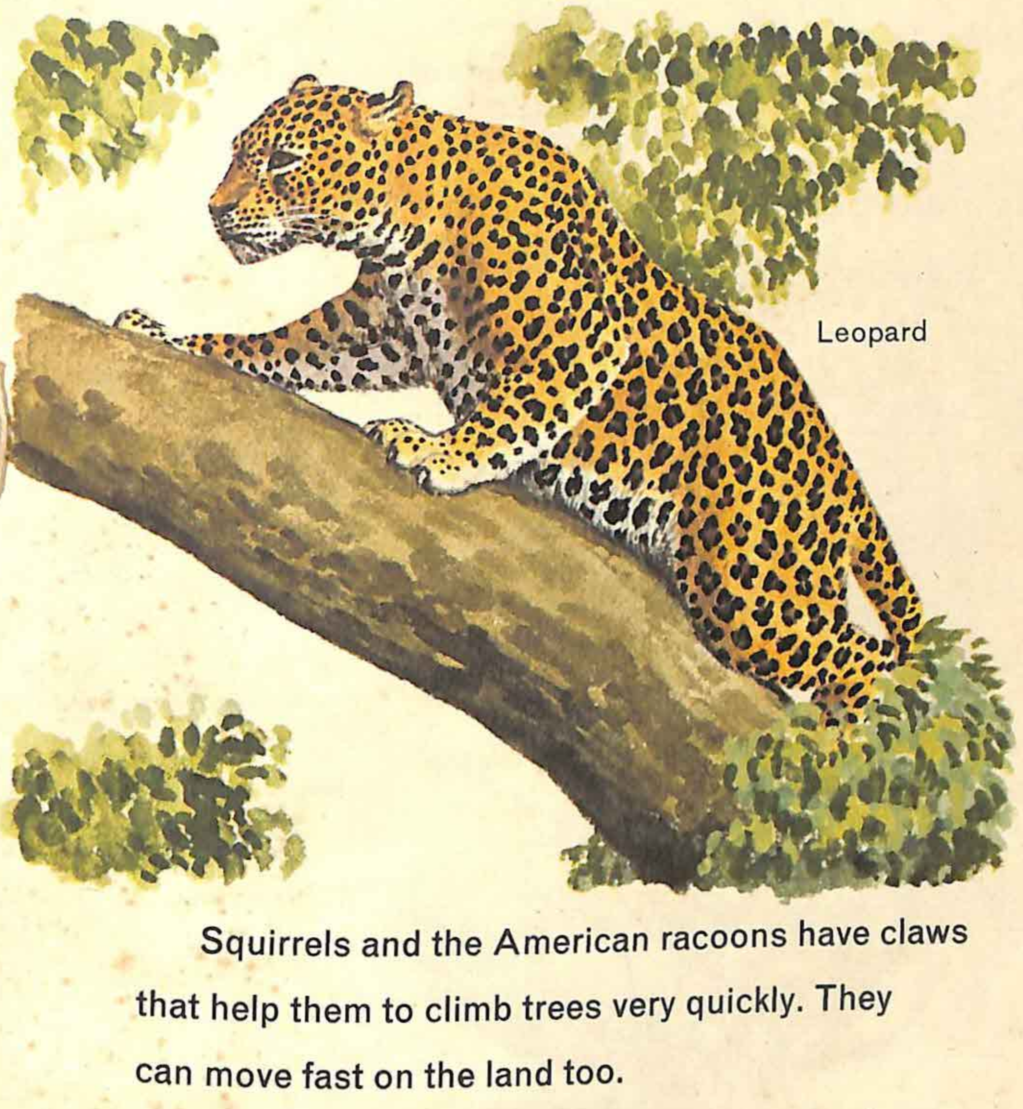
Mammals move from place to place in many different ways. They walk, run, hop, jump, swim, and even fly.

Dolphins, porpoises and whales move only by swimming. They are helpless on land.

The rhinoceros can run fast, the kangaroo can take long jumps, and the flying squirrel can glide through the air.



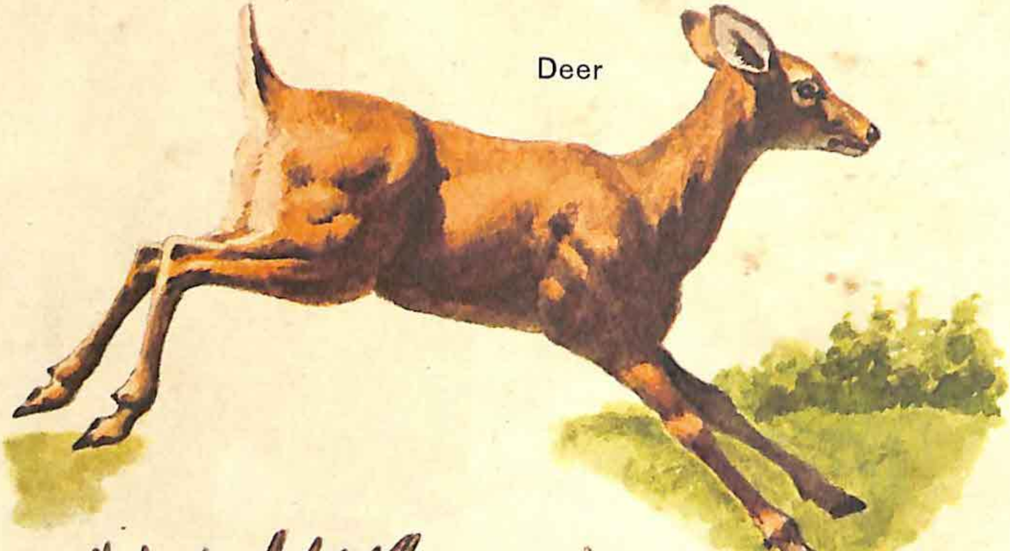
Walruses and seals swim very well. When they are on land they move with a sort of bounce. They cannot move fast on land.



Squirrels and the American racoons have claws that help them to climb trees very quickly. They can move fast on the land too.

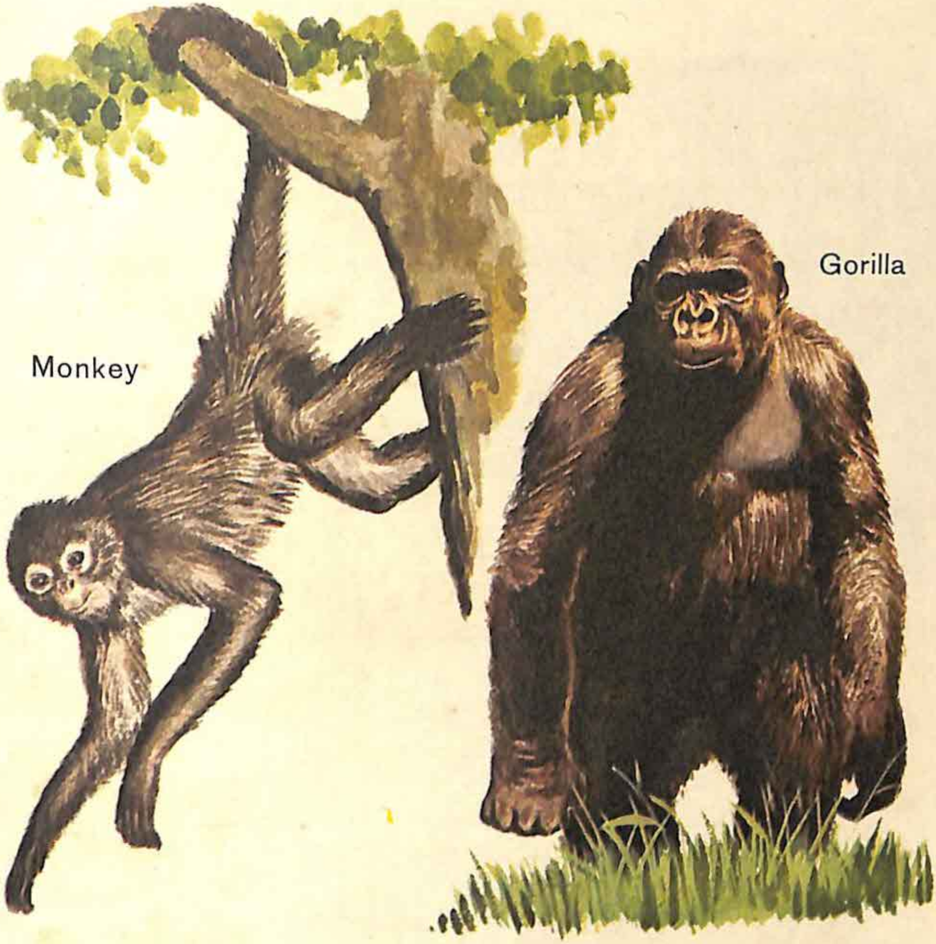
Mountain lions, leopards and other animals of the cat family have strong toes with sharp claws. They can run fast and climb fast.

Deer run very fast, and they can jump high. Other animals of the deer family, such as the elk and the moose, can run fast too. Deer, elk and moose are all good swimmers.

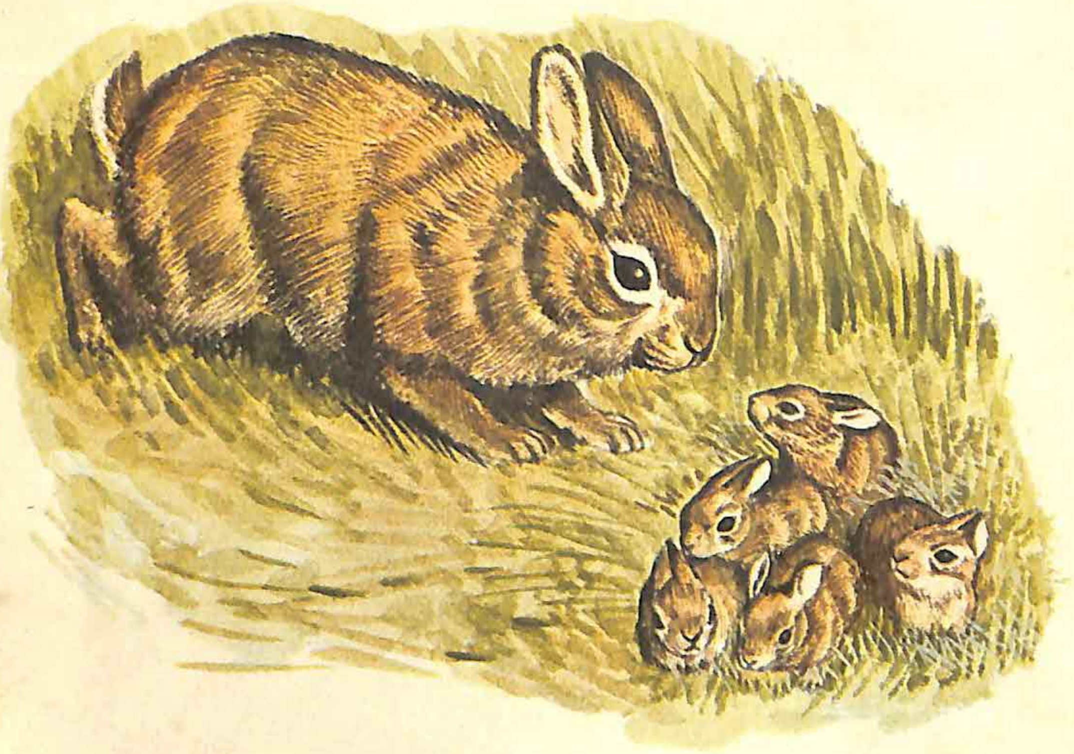


Deer

Moose



Some of the monkeys that are found in South and Central America use their arms and legs and their tails too for swinging among the trees. Men and some of the apes, such as gorillas, stand up, and can walk or run on two legs.



Before they are born, the young of mammals live and grow inside their mother's body. Most mammals do not have many young at one time.

Before the young of mammals are born, they get their food from their mother's body. After they are born, they are fed by their mother's milk.

The young of most mammals are born alive. The young of most mammals are quite helpless when they are born. But some mammals, such as deer and antelope, can run only a few hours after they are born.

All mammals take care of their babies when they are very young. Some take care of them for a long time.

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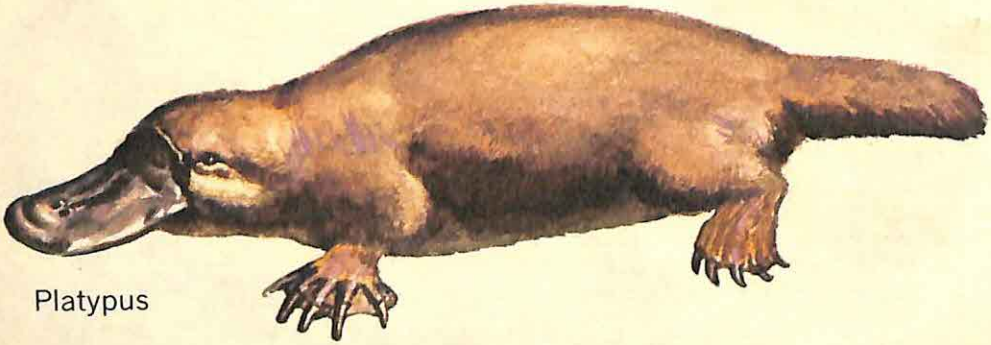
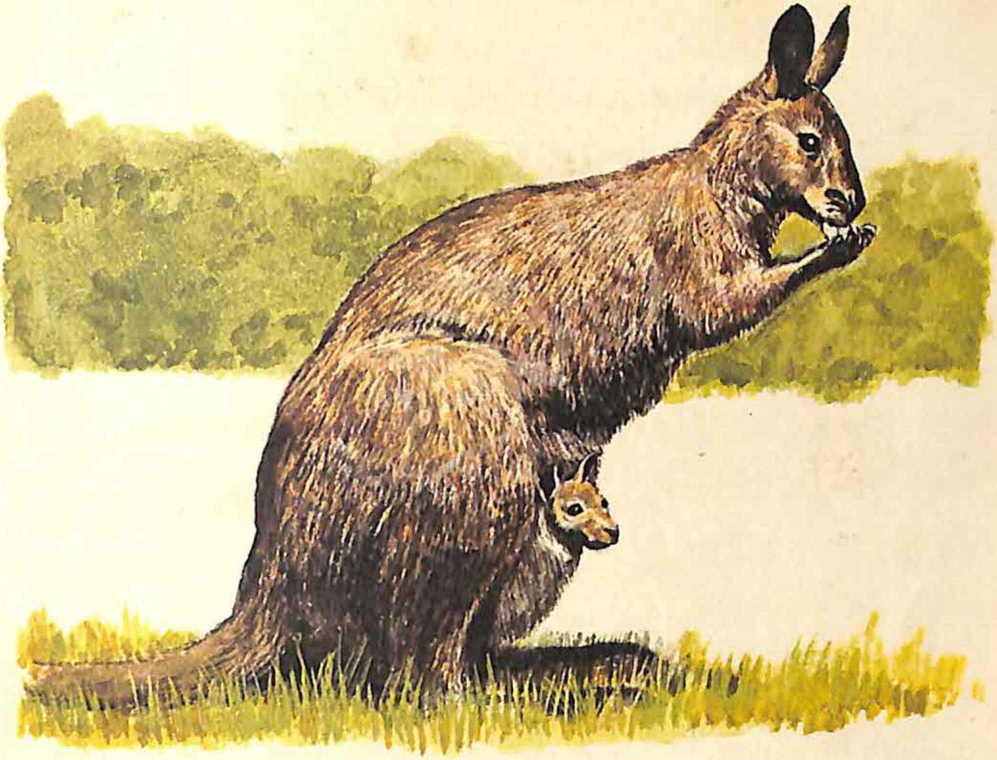
There are some kinds of animals that are true mammals, but have ways that are very different from most mammals.

The strangest mammal is the platypus. Its bill looks like a duck's. That is why it is also called the duckbill. The platypus has webbed feet. Its body is covered with fur. It lives in water for part of the time.

The platypus lays eggs. But after the young are hatched, they are fed with their mother's milk. The platypus lives only in Australia and Tasmania.

Another Australian mammal that lays eggs is the spiny ant-eater.


Platypus



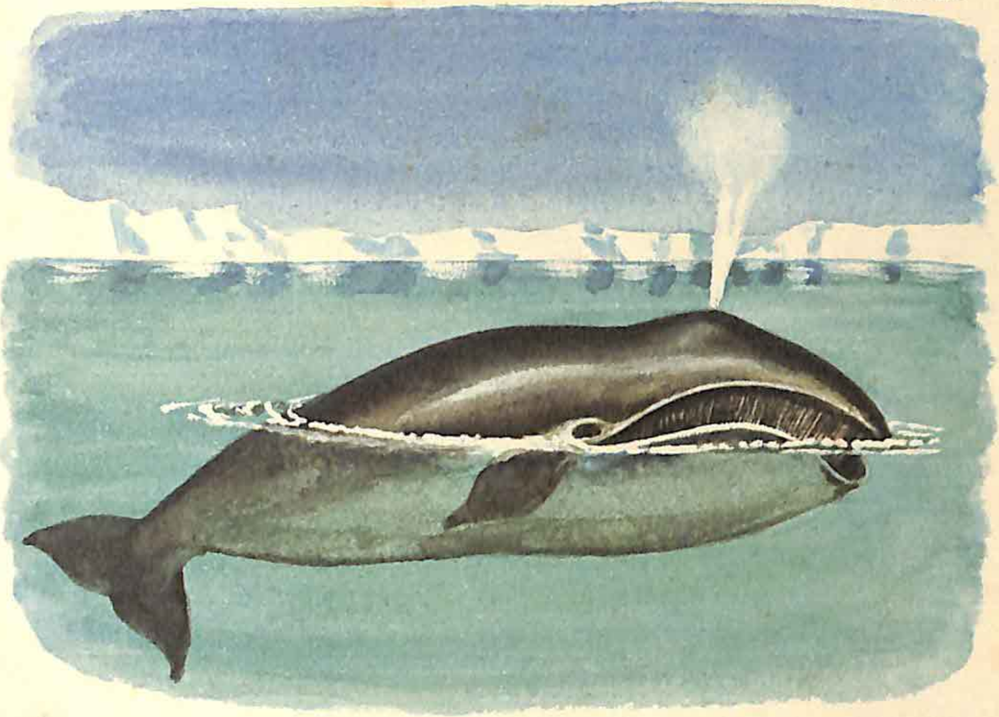
Other odd kinds of mammals live in Australia. There are the kangaroos. Baby kangaroos are born before they are fully developed. The tiny babies are carried inside the mother's pouch, where they keep on growing and developing. They live on their mother's milk while they are in the pouch.

Some other animals carry their babies in a pouch after they are born. One of these animals is the wombat. The wombat lives in Australia too.

One of the animals with a pouch lives in America. It is the opossum. The opossum's babies are as small as bees when they are born. They live and grow in their mother's pouch for nine to ten weeks.

Opossum and Baby

Greenland Right Whale, or Bowhead



Whales are mammals that live only in the water. But they must come to the surface from time to time to breathe. If they did not do this, they would drown.

The great whales are not only the largest mammals; they are the largest of all animals. The biggest whale of all is the biggest animal that has ever lived on earth.

Bats are the only mammals that can fly. The bat's forearms and fingers are very long and have skin between them. These are its wings.

As a bat flies, it sends sounds towards other objects. The sounds hit the objects and bounce back, telling the bat where the objects are. It can then fly in the dark without hitting anything.

The little brown bat is only about three and a half inches long, but some bats are a foot long.

Many of the bats are useful to man because they eat so many harmful insects.

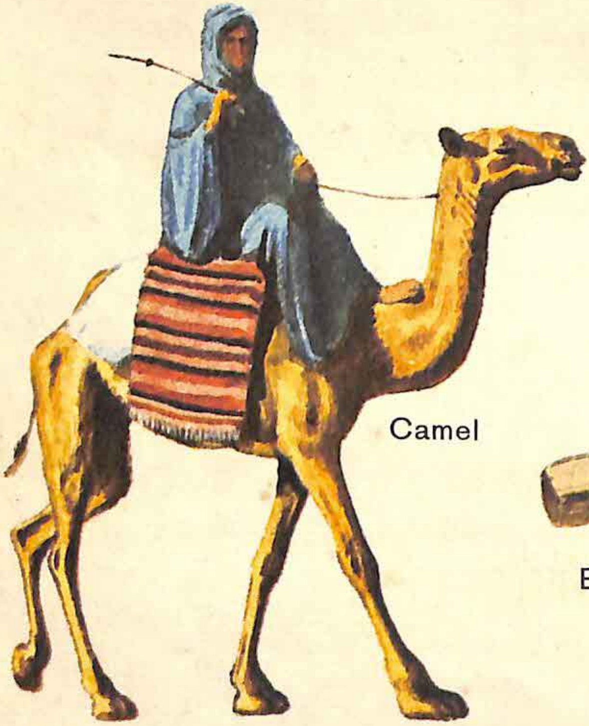
Fox

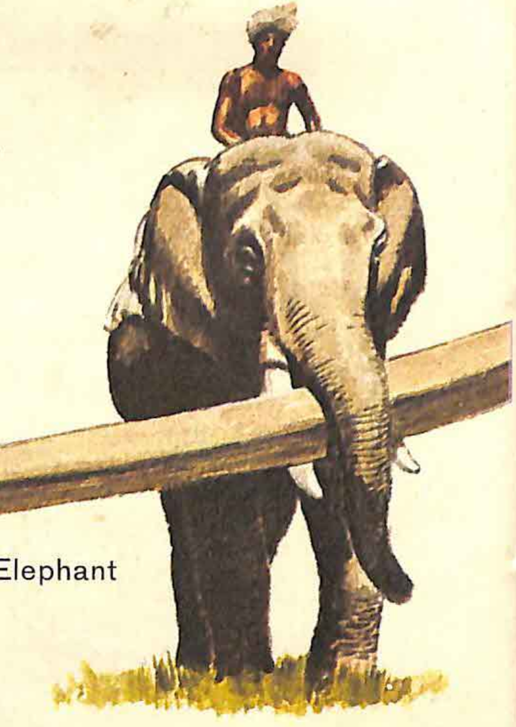
Some mammals do a great deal of harm. Weasels and foxes eat chickens. Rats and mice often carry disease. They often eat food that is in store and spoil the part of the food that they do not eat.

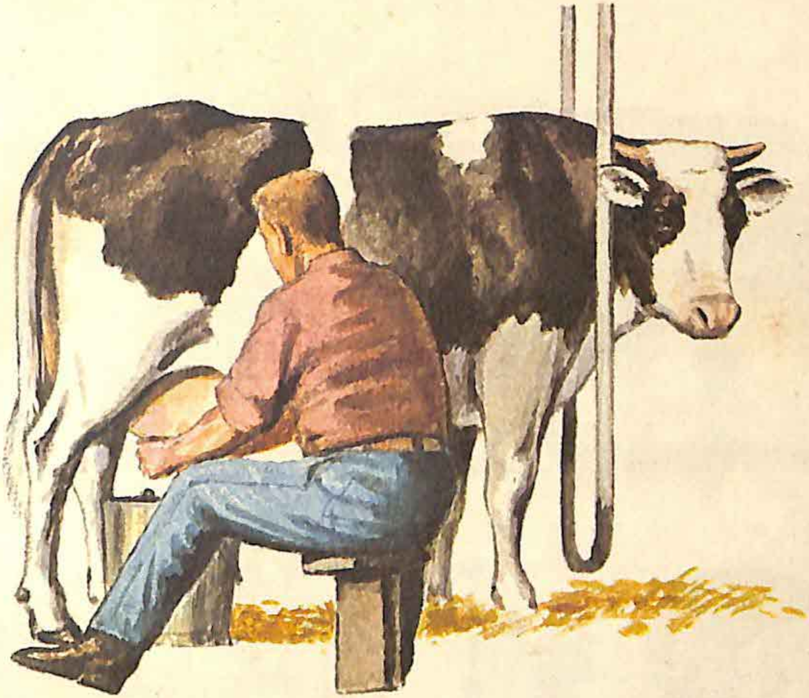
Millions of pounds worth of man's food is destroyed every year because of rats, rabbits and foxes.

But mammals are more helpful than they are harmful. Mammals help to make the soil richer. They do this by passing out of their bodies the parts of their food that their bodies cannot use.

This waste matter or manure has chemicals in it that make the soil richer. When mammals die, their bodies decay and add more chemicals to the soil.


Camel


Elephant



Horses, camels and elephants are some of the mammals that work for man. They pull wagons and carry man and do other hard work.

Dogs sometimes pull sledges. Dogs protect people, and they are useful in tracking .They are good company too.

Much of our food comes from mammals. Beef, pork, lamb, butter, cheese and milk are all foods that we get from mammals.

We get some of our clothing from mammals. Furs for warm coats, wools for sweaters and other clothes, leather for shoes and jackets all come from mammals.

Many other things that we use every day come from mammals.

Things you can do

Visit a natural history museum. A natural history museum will make it possible for you to look at a large number of different kinds of mammals all at the same time. In this way you will be able to see how mammals are alike and how they are different.

Make a list of the mammals you see, and divide them up into groups of the same kind. Scientists divide mammals into such groups as (1) flesh-eating mammals like the cat, dog, lion, tiger and wolf; (2) gnawing mammals like the beaver, rat and squirrel, porcupine and rabbit; (3) insect-eating mammals like the ant-eater and shrew; (4) hoofed mammals like the horse, deer, cow, giraffe, pig, hippopotamus and rhinoceros; (5) sea animals like the whale, porpoise and dolphin; (6) erect mammals like the gorilla, chimpanzee, orangutan and monkey; (7) trunk-nosed mammals like the elephant; (8) flying mammals like the bat; (9) pouched mammals like the kangaroo and the opossum; (10) toothless mammals like the sloth and the armadillo; (11) egg-laying mammals like the platypus and the spiny ant-eater.

Study a tame mammal. Make a careful study of a cat or dog or of a larger mammal. Prove that it is a mammal. Does it have hair? Is it warm-blooded? Does it have two pairs of legs? Are its babies born alive, and do the babies feed on their mother's milk? Who are its enemies and its friends? At what time of day is it most active? What kind of food does it eat? Is it very friendly? How does it behave when other animals or when people come near it?

Show how mammals protect themselves. Make a list of the different ways in which mammals protect themselves. Some animals have horns, tusks and antlers. Others have sharp claws and teeth. Some have strong hoofs. Some are very fast and can run away from their enemies. Some are coloured in such a way that they cannot be seen in the field or forest where they are standing.

How mammals help us. Make a list of helpful mammals and the ways in which they help us. Some mammals, like the horse and the camel, are workers. Mammals like the cow give us food. Mammals like the sheep give us clothing as well as food. The dead bodies of many mammals are made into fertilizer, bone meal, buttons, glue, tallow for candles and leather.

Words younger children may need help with

(Numbers refer to page on which the word first appears)

4 different
groups
divided
backbones
vertebrates
invertebrates
5 salmon
amphibians
reptiles
alligators
eagles
6 shrews
inches
weigh
ounce
tons
8 warm-blooded
walruses
climate
Africa
Tibet
9 temperate
porpoises
10 hippopotamus
muskrats
11 underground
sloths
12 ant-eaters
insects
13 grinding
14 shearing
stabbing
gnawing
15 dolphins
17 racoons
claws
leopards
19 gorillas
22 strangest
platypus
duckbill
webbed
Australia
Tasmania
spiny
23 kangaroos
developed
pouch
24 wombat
opossum
25 surface
breathe
26 forearms
useful
harmful
27 weasels
disease
28 manure
chemicals
decay
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elephant
sledge

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